

# MCB0260B - Preliminary

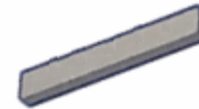
## 38.4 - 40.0 GHz mmWave ClearPlex Bandpass Filter

### Features

- High-Q Low-Loss with High Rejection
- Narrowband subset of N260 band

### Applications

- mmWave carrier-grade Infrastructure applications



Part Dimensions: EST 8.6 × 1.7 × 0.9 mm • <1.0 g

### Description

Surface mount bandpass filter with I/Os that can interface to micro-strip transmission lines on the top-layer of customer PCBs. Superior rejection, insertion loss, reliability, temperature stability as well as both peak and average power handling compared to other mmWave bandpass filter technologies.

### Electrical Specifications

Parameter	Frequency (GHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	5.0 Watt max
Peak Input Power	-	-	-	50 Watt max
<b>Input-Output Response</b>				
Passband Insertion Loss (400 MHz avg)	38.40 - 40.00			2.2 dB <b>Goal</b> 3.0 dB <b>Max</b>
Passband Ripple	38.40 - 40.00			0.9 dB <b>Goal</b> 1.4 dB <b>Max</b>
Passband Return Loss	38.40 - 40.00			14 dB <b>Goal</b> 12 dB <b>Min</b>
Attenuation:	< 36.00			50 dB min

Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB

### Mechanical Drawing

Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	8.50	0.10
B	1.50	0.20
C		
D		
E		
F		
G		
H	0.80	0.10
I		
J		

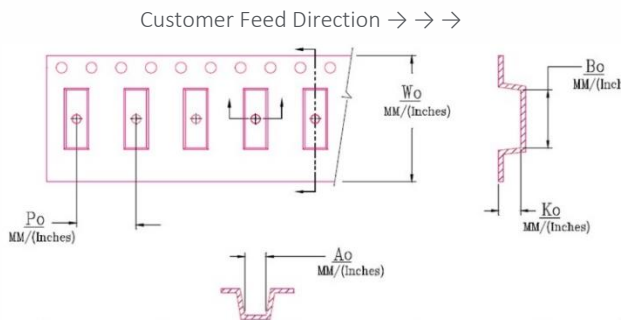
Dimensions are NOT final.

### PCB Layout



### Packaging and Marking

Dimension	Units	Spec.	Product Marking (TBD on the filters)
Reel Diameter	mm	330	
Reel Weight	kg	x.x	
Reel Quantity	ea.	Xxx	



$W_0$	$A_0$	$B_0$	$K_0$	$P_0$
0.945 in 24.0 mm	0.070 in 1.78 mm	0.350 in 8.9 mm	0.051 in 1.3 mm	0.315 in 8.0 mm

### Electrical Response

